

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-742 REV. E  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-742 REV. 4

REF. FAA STC: SR01583SE  
REF. CANADIAN STC: SH05-37  
REF. EASA STC: EASA.IM.R.S.01126

## PURPOSE:

The purpose of this service instruction is to provide instructions for upgrading D412-742-011/-013 Skidtube Installations at CHG 006 and earlier with the heavy duty wearplates of CHG 007 and subsequent installations. The DSI9517-011 Wearplate Kit contains the necessary wearplates and hardware for this upgrade.

## INSTALLATION PROCEDURE:

Replace D3564-1/-3/-5/-13 Wearshoes, D3537-1/-7/-13 Wearpads, D3553-1/-3 and D3566-1/-3/-5/-13 Gaskets with D4095-041/-043/-045/-047/-049/-051 Wearshoes Assemblies as follows:

1. Remove existing D3564-1/-3/-5/-13 Wearshoes and D3566-1/-3/-5/-13 Gaskets per Item 32.6.1 of ICA-D412-742.
2. Remove qty(4) AN4C52A Bolts, D3403-1 Bushings, and qty(8) D3672-11 Washers as indicated in Figures 1 and 2 of this service instruction.
3. Inspect the skidtube and saddles per Chapter 5 of ICA-D412-742.
4. Seal existing inserts located on both sides of the skidtube in area shown in Figures 1, 2 and 3 of this service instruction using Sikaflex -241/-291 or Proseal 890 or MIL-S-8802 Class 2B sealant.
5. Locate the D4095-041/-043 Wearplates as shown in Figure 1, 2 and 3 of this service instruction.
6. Transfer drill qty (2) Ø0.438 hole from the skidtube/saddle to the D4095-041/-043 Wearplate Assemblies. Deburr. Touch up finish per Item 5.2.14 of ICA-D412-742 as required.
7. Install the remaining portions of the DSI-9517-011 Wearplate Kit (D4095-045/-047/-049/-051) using the same AN3C hardware as shown in ICA-D412-742. Torque to 15-25 in-lbs (1.7-2.8 N-m).
8. Install D3403-5 Bushings and AN4C53A Bolts in lieu of D3403-1 Bushings and AN4C52A Bolts removed at step 2 above. Ensure that the nuts on the AN4C Bolts are on the inboard side of the skidtube. Torque to 50-70 in-lbs (5.7-7.9 N-m).  
Note: It is acceptable to trim the smaller end of D3403-5 Bushings to obtain a 0.005" pinch fit on the Wearshoes/Saddles
9. Amend weight and balance per the Weight and Balance Table below.

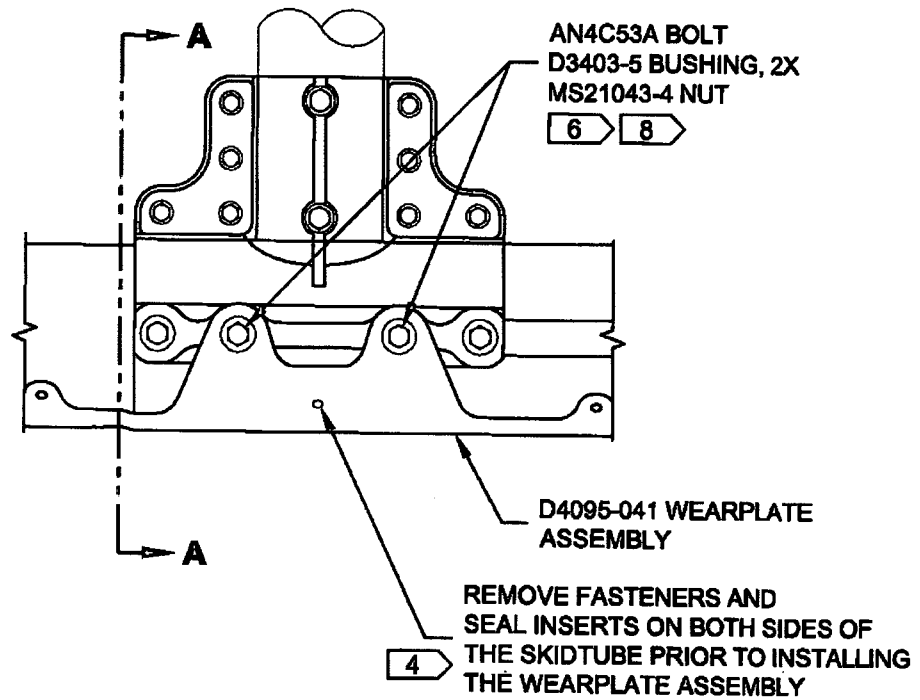
## WEIGHT AND BALANCE:

Use the following weight and balance information for DART D412-742-011/-013 skidtube and saddle installations equipped with DSI-9517-011 Wearplate Kit.

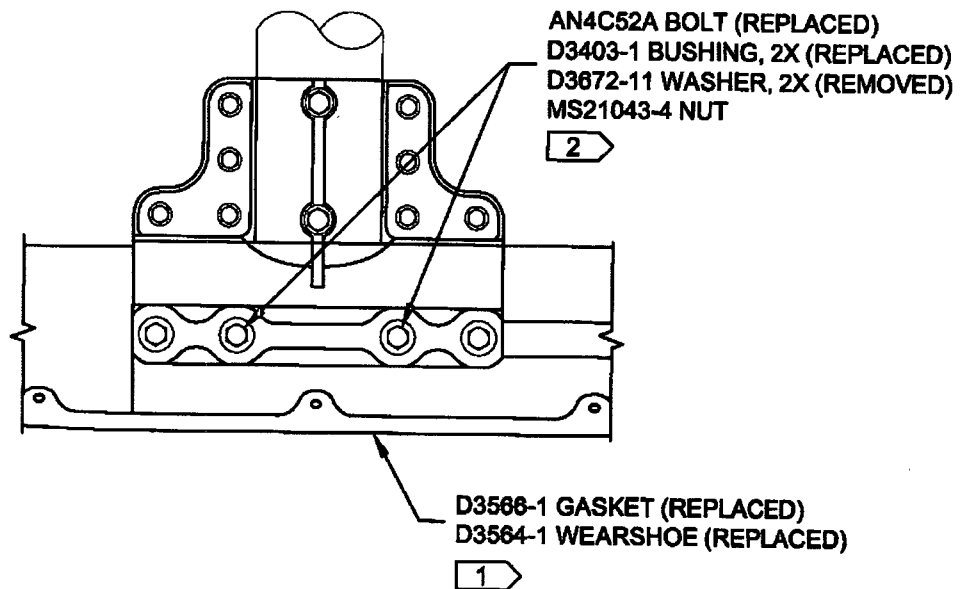
INSTALLATION	WEIGHT	LATERAL		LONGITUDINAL	
		ARM	MOMENT	ARM	MOMENT
<b>D412-742-011</b> <i>Float Skidtube Installation with DSI-9517-011 Kit Installed</i>	70.0 lb 31.8 kg	±55.0 in ±1.40 m	±3850 in-lb ±44.5 m-kg	130 in 3.3 m	9100 in-lb 105 m-kg
<b>D412-742-013</b> <i>Float Skidtube Installation with DSI-9517-011 Kit Installed</i>	70.0 lb 31.8 kg	±55.0 in ±1.40 m	±3850 in-lb ±44.5 m-kg	130 in 3.3 m	9100 in-lb 105 m-kg

C	REMOVE SHEET 5&6, ADD D4095-045/-047/-049/-051		DW	13.09.25
B	ITEM 21B AND 22B REMOVED FROM PARTS LIST		XDF	11.10.11
A	NEW ISSUE		MB	10.04.21
REV.	DESCRIPTION		BY	DATE
DESIGN		<b>DART AEROSPACE USA, INC</b> KENT, WA		
DRAWN	DW			
CHECKED	AP	DRAWING NO. DSI 9517	REV. C SHEET 1 OF 4	
MFG. APPR.	N/A			
APPROVED	HS	TITLE ALTERNATE WEARPLATE KIT	SCALE NTS	
DE APPR.				
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**IS:**



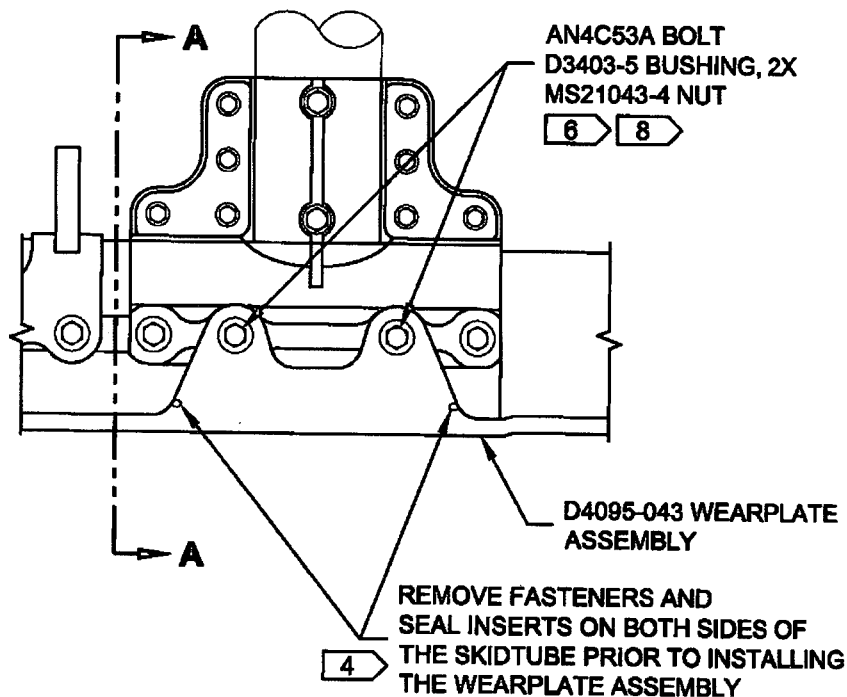
**WAS:**



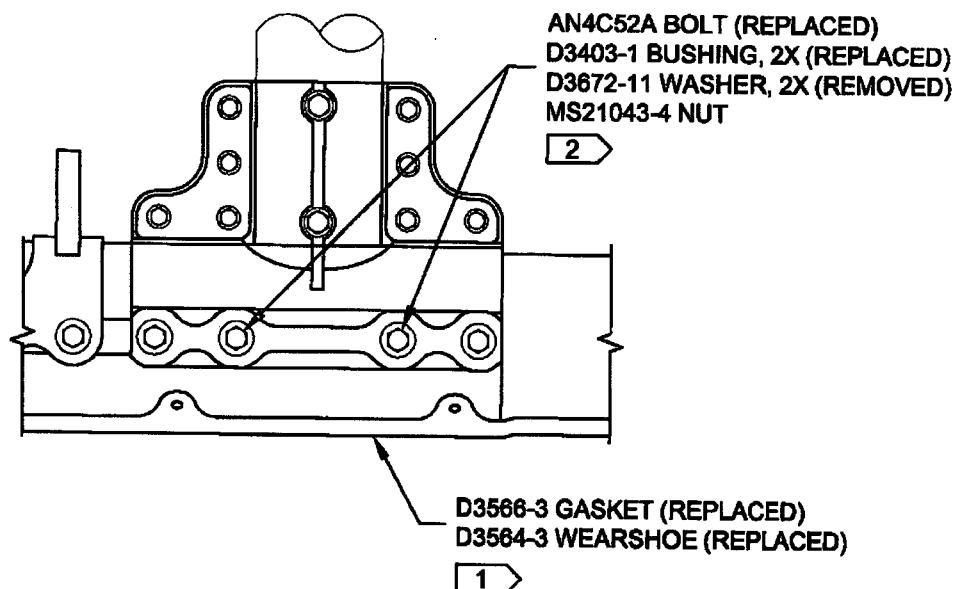
**FIGURE 1: CHANGE AT FORWARD SADDLE LOCATION  
WITH DSI-9517-011 KIT INSTALLED**

DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE USA, INC</b>	
DRAWN	DW	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N.A.	DSI 9517	SHEET 2 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ALTERNATE WEARPLATE KIT	NTS
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IS:

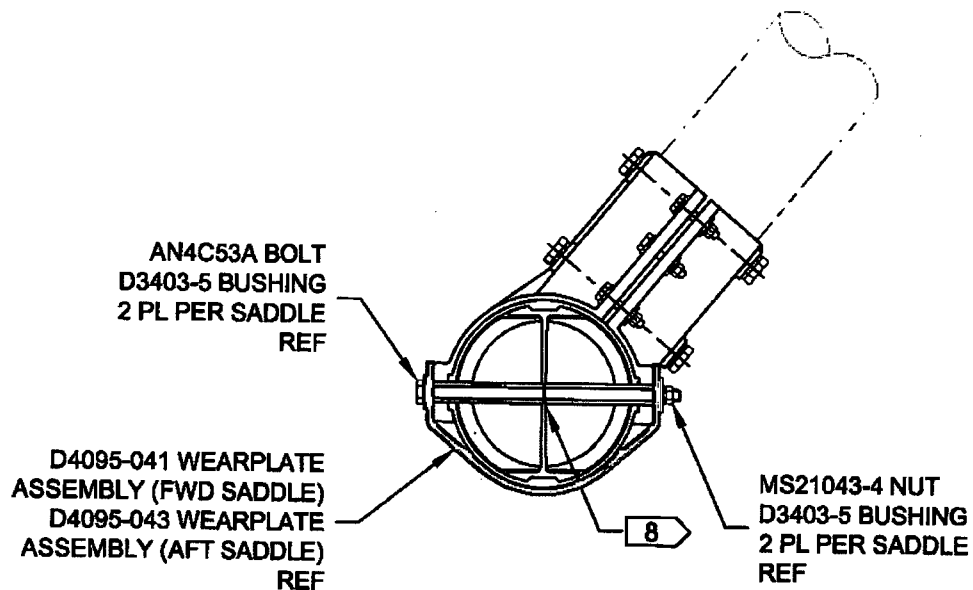


WAS:



**FIGURE 2: CHANGE AT AFT SADDLE LOCATION  
WITH DSI-9517-011 KIT INSTALLED**

DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE USA, INC</b> KENT, WA	
DRAWN	DW		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N.A.	DSI 9517	SHEET 3 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ALTERNATE WEARPLATE KIT	NTS
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### SECTION A-A

#### DSI-9517-011 PARTS LIST:

QTY -011	PART NUMBER	DESCRIPTION
X	DSI-9517-011	WEARPLATE KIT
8	D3403-5	BUSHING
1	D4095-041	WEARPLATE ASSEMBLY (REPLACES D3564-1)
1	D4095-043	WEARPLATE ASSEMBLY (REPLACES D3564-3)
1	D4095-045	WEARPLATE ASSEMBLY (REPLACES D3564-5)
1	D4095-047	WEARPAD ASSEMBLY (REPLACES D3537-7)
1	D4095-049	WEARPAD ASSEMBLY (REPLACES D3537-1)
1	D4095-051	WEARPAD ASSEMBLY (REPLACES D3537-13)
4	AN4C53A	BOLT

DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE USA, INC</b> KENT, WA	
DRAWN	DW		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N.A.	DSI 9517	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ALTERNATE WEARPLATE KIT	NTS
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